

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of manufacturing a magnetic film comprising the steps of:

forming a magnetic layer on a substrate;
defining a first area and a second area of the magnetic layer;
treating the first area of the magnetic layer with an ion beam beam to form a first area easy axis having a first direction while masking the second area; and
treating the second area of the magnetic layer with an ion beam in a magnetic field to form a second easy axis having a second direction while masking the first area.

2. (Currently Amended) The method of manufacturing a magnetic film of claim 1 wherein the magnetic layer comprises an at least one rare earth material selected at least one from the group consisting of Pt, Pd, Au, and Tb.

3. (Original) The method of manufacturing a magnetic film of claim 1 wherein the angle difference between the direction of the first easy axis and that of the second easy axis is from 60° to 90°.

4. (Currently Amended) The method of manufacturing a magnetic film of claim 1 wherein the magnetic layer comprises a at least one transition metal selected at least one from the group consisting of Co, Ni, and Fe.

5. (Currently Amended) The method of manufacturing a magnetic film of claim 1 wherein the beam comprises ~~an~~ at least one inert gas selected ~~at least one~~ from the group consisting of He, Ne, Ar, Xe, and Kr.

6. (Currently Amended) A method of manufacturing a magnetic film comprising the steps of:

forming a magnetic layer on a substrate;

applying an ion beam into a selected area of the magnetic layer to form a first easy axis having a first direction while masking another selected area, and

applying a magnetic field to the magnetic film and applying an ion beam into the another selected area of the magnetic layer to form a second easy axis having a second direction while masking the selected area.

7. (Cancelled)

8. (Currently Amended) The method of manufacturing a magnetic film of claim 6 wherein the magnetic layer comprises ~~a~~ at least one transition metal selected ~~at least one~~ from the group consisting of Co, Ni, and Fe.

9. (Currently Amended) The method of manufacturing a magnetic film of claim 6 wherein the beam comprises ~~an~~ at least one inert gas selected ~~at least one~~ from the group consisting of He, Ne, Ar, Xe, and Kr.

10. (Currently Amended) A method of manufacturing a magnetic film comprising the steps of:

forming a magnetic layer on a substrate;

treating the magnetic layer with an ion beam in a first area to form a first easy axis having a first direction while masking a second area; and

applying a magnetic field to the magnetic film and treating the magnetic layer with an ion beam in the second area to form a second easy axis having a second direction while masking the first area.

11. .(Currently Amended) The method of manufacturing a magnetic film of claim 10 wherein the magnetic layer comprises ~~a~~ at least one transition metal selected ~~at least one~~ from the group consisting of Co, Ni, and Fe.

12. -13. (Cancelled)

14. (Currently Amended) A method of manufacturing a magnetic film comprising the steps of:

forming a magnetic layer on a substrate;

covering the magnetic layer with a first mask opening a first area while covering a second area;

treating the first area with an ion beam to form ~~an~~ a first easy axis;

rotating the magnetic layer in some degree;

covering the magnetic layer with a second mask opening a the second area
while covering the first area; and

treating the second area with an ion beam to form an a second easy axis.

15. (Currently Amended) A method manufacturing a magnetic film comprising the steps of:

forming a magnetic layer on a substrate;

covering the magnetic layer with a first mask opening a first area while covering a second area;

treating the first area with an ion beam in a magnetic field to form an a first easy axis;

rotating the magnetic layer in some degree;

covering the magnetic layer with a second mask opening a the second area while covering the first area; and

treating the second area with an ion beam in a magnetic field to form a second easy axis.